

CLAIMS

1. A liquid manure spreading tool bar for use on a manure spreader comprising:

5 a tank for transporting manure; and
 a manure pump having an inlet located within the tank and an outlet located outside said tank to supply the manure stored in the tank to said manure spreading tool bar;

wherein said manure spreading tool bar comprises:

10 a supporting frame externally mounted onto the tank in such a manner as to be movable up and down with respect to said tank;

 means for vertically moving the supporting frame up and down between a low position and a high position relative to the tank;

 a liquid manure distributor mounted onto the supporting frame,
15 said distributor having an inlet for receiving manure and at least one outlet;

 a vertically extending telescopic conduit made of a rigid material, said telescopic conduit having one end connected to the outlet of the pump and another end connected to the inlet of the distributor so as to
20 feed the manure pumped from the tank to the distributor whatever be the vertical position of the frame relative to the tank; and optionally

 a manure discharging pipe connected to each of said at least one outlet of the distributor, each of said at least one discharging pipe being made of a rigid material and being vertically movable up and down
25 together with said frame and said distributor.

2. The liquid manure spreading tool bar according to claim 1, wherein each of said at least one manure discharging pipe is connected onto said supporting frame.

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3. The liquid manure spreading tool bar according to claim 2, wherein each of said at least one manure discharging pipe comprises an outlet to

which a deflector for deflecting manure over the ground is connected thereto, said deflector being interchangeable and comprises an adjustable sizing outlet.

- 5 4. The liquid manure spreading tool bar according to claim 1, wherein one or more of said at least one manure discharging pipe comprises a bottom portion that is pivotable between an inwardly position where said bottom portion extends adjacently to the manure tank, and an outwards position where said portion extends away from the manure tank for
10 spreading manure at a predetermined distance.
- 15 5. The liquid manure spreading tool bar according to claim 1, wherein the end of the vertically extending telescopic conduit connected to the inlet of the manure distributor is at the top of said telescopic conduit, and the
other end of said telescopic conduit connected to the outlet of the pump is at the bottom of said telescopic conduit.
- 20 6. The liquid manure spreading tool bar according to claim 5, wherein each of said at least one manure discharging pipe comprises a portion projecting upwardly on top of said manure distributor and a remaining portion extending downwardly without any horizontal sections so as to avoid any blockages.
- 25 7. The liquid manure spreading tool bar according to claim 1, comprising three of said at least one manure discharging pipe, one of said at least three manure discharging pipes being positioned centrally between said supporting frame and said tank and the two other manure discharging pipes being positioned laterally opposite to one another on opposite sides of the tank.

8. The liquid manure spreading tool bar according to claim 1, wherein said means for vertically moving the supporting frame up and down between a low position and a high position relative to the tank is a hydraulic system.

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9. The liquid manure spreading tool bar according to claim 1, wherein each of said at least one discharging pipe is provided with an upwardly projecting air vent.

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10. The liquid manure spreading tool bar according to claim 2, wherein:

one or more of said at least one manure discharging pipe comprises a bottom portion that is pivotable between an inwardly position where said bottom portion extends adjacently to the manure tank, and an outwards position where said portion extends away from the manure tank for spreading manure at a predetermined distance; and

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the end of the vertically extending telescopic conduit connected to the inlet of the manure distributor is at the top of said telescopic conduit, and the other end of said telescopic conduit connected to the outlet of the pump is at the bottom of said telescopic conduit.

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11. The liquid manure spreading tool bar according to claim 10, wherein:

each of said at least one manure discharging pipe comprises a portion projecting upwardly on top of said manure distributor and a remaining portion extending downwardly without any horizontal sections so as to avoid any blockages; and

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each of said at least one discharging pipe is provided with an upwardly projecting air vent.

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